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To Assess the Knowledge of a Video-assisted Teaching Programme Regarding Breast Self-examination Among First-year Students

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ABSTRACT

A study was conducted regarding knowledge of Breast Self- Examination among 30 college students attending E.G.S Pillay Engineering College, Nagapattinam. Pre-experimental one group pre-test and post-test design was adopted. Data were collected from the college students by structured knowledge questionnaire. Data obtained were analyzed by using descriptive and inferential statistics. Regarding pre-test knowledge of Breast Self-Examination for college students, 83.3% of participants had inadequate Knowledge, 13.3% had moderate Knowledge, and only 3.3% had adequate Knowledge and After the Video Assisted Teaching programme, the post-test results showed a marked improvement 73.3% of the participants had adequate Knowledge, 20% had moderate Knowledge, and only 6.7% remained in the inadequate category. Chi-square analysis revealed a significant association between Knowledge level and variables such as Age in years, Religion, State, Type of family, Residence, Yearly income, Source of information about Breast Self-Examination. The findings indicate that the Video Assisted Teaching Programme was effective in improving Knowledge of Breast Self-Examination for college students. Breast Self-Examination is a simple non-invasive early detection method used to detect breast cancer at early stage, it should be done by all women older than 20 years. Breast Self-Examination is an important way to find out or detect cancer at early stage when it is more likely to be treated successfully.

Keywords: Breast Self-examination; Breast Cancer Awareness; Video-assisted Teaching Programme; Health Education; Knowledge Assessment; Early Detection; First-year Students; Women's Health; Cancer Prevention; Nursing Education.

1. Introduction

Breast is a specialized organ of the female body and breast milk nurtures the newborn. Females are very conscious about it as they will be depressed if they have any disease or illness related to this organ. So, prevention of diseases related to breast is very important. Breast Cancer is one of the most common types of cancer affecting women worldwide, according for approximately 11.7% of all new cancer case (GLOBAL AN 2020). Early detection of breast cancer is crucial for affective treatment and improved survival rates. Breast Self- Examination (BSE) has been widely promoted as a simple non-invasive and cost effective method for early detection of breast cancer

Breast Self-Examination can be taught to individuals or to groups, BSE is best performed after menstruation (day 5 to day 7) for post-menopausal women once a month. Many women have grainy textured breast tissue, but these areas are usually less nodular after menses. Women should begin practicing BSE at their late teens or early 20s. The nurse plays a pivotal role in preventive education.

Breast cancer is commonly related to late diagnosis due to delayed presentation by the patient and less expectation of the disease from physicians. According to a study done in the United States, breast cancer incidence in young females also differs according to race and ethnicity. The study indicated that Afro- American women below age 35 have twofold the incidence of invasive breast cancer and threefold breast cancer death than young white women. Besides, the study finding showed that the young women had a poor survival rate compared to those in older

women and the younger age groups were significantly associated with adverse outcome. Furthermore, studies revealed an advanced stage of breast cancer presentation was higher among women with low socioeconomic status.

World Health Organization (WHO) recommends developing nations those suffering the dual saddle of cervical and breast cancer to implement economical and inexpensive interventions to confront these greatly preventable diseases. Although there is no proof of the worth of screening through BSE, the BSE practice has been appreciated to enable women, taking concern for their health. BSE is a suitable and cheap means that can be implemented regularly. The American Cancer Society and other leading cancer agencies recommended the monthly practice of BSE. A country with inadequate resource facilities and poor health systems ought to promote early diagnosis programs based on breast self-exam, awareness of early signs and symptoms, and prompt referral to diagnosis and treatment.

2. Needs of the Study

According to World cancer research fund international and WHO, in 2023, there were 2.3 million women diagnosed with breast cancer and 6,85,000 deaths globally. ICMR report describes that, the incidence rate of breast cancer in India began to rise in early thirties and peak at the ages between 50 to 64 years. Overall, in 28 women is likely to develop breast cancer during their life time.

3. Statement of the Problem

A Study to Assess the Knowledge on Video Assisted Teaching Programme Regarding Breast Self-Examination among First year students studying at selected college, Nagapattinam.

4. Objectives

1) To assess the pre- test level of knowledge regarding Breast Self-Examination among college students before intervention.

2) To evaluate the Effectiveness of Video Assisted Teaching on knowledge regarding Breast Self- Examination among college students in after intervention.

3) To find out the association between pre-test level of knowledge score regarding Breast Self-Examination with their selected demographic variables.

5. Hypothesis

H1- There is a significant difference between pre-test and post-test level of knowledge regarding Breast Self-Examination among college students.

H2- There is a significant association between the pre-test levels of knowledge regarding Breast Self-Examination among college students with selected demographic variables.

6. Methodology

The Pre-Experimental one group pre-test and post-test research design carried out to assess the Knowledge regarding Breast Self-Examination among E.G.S Pillay Engineering College, Nagapattinam. Totally of 30 samples

were selected by convenient sampling technique method. Pretest was conducted by using structured Knowledge questionnaire regarding Breast cancer and Breast Self-Examination. On the same day of pre-test, the Video Assisted Teaching regarding Breast Cancer and Breast self-examination was administered and instructed the girls to listen the Video. Post test was conducted one week after administration of Video Assisted Teaching regarding Breast self-examination by using the same structured knowledge questionnaire which was used for the pre-test. Data was analyzed using of descriptive and inferential statistics.

7. Result and Discussion

- Regarding the demographic variables of knowledge score majority of the college students 93.3% belongs to age group of 18 years, 100% of college student were BE CSE, 86.6% of student belongs to religion of Hindu, 90% of student were state was Tamil Nadu, 93.3% of student belongs to nuclear family, 93.3% of student residence was rural, 50% of student family income was 50,000-70,000, 100% of student was taking mixed food habits, 53.3% of student were get knowledge from media, 100% of students has not perform Breast Self-Examination.

- Analysis of pre-test level of knowledge on Video Assisted Teaching programme regarding Breast Self-examination among college students that shows, out of 30 college students, majority of students 25 (83.3%) had inadequate knowledge, 4 (13.3%) had moderate knowledge and 1 (3.3%) had adequate knowledge. That means, mean value was 37.4 and standard deviation value was 3.5.

- In post-test majority of students 22 (73.3%) have gained adequate knowledge, 6 (20%) have gained moderate knowledge, and 2 (6.7%) have gained inadequate knowledge. That means, mean value was 75.2 and standard deviation value was 13.89.

- The finding related to the knowledge on video assisted teaching programme regarding Breast Self-Examination among college students was analyzed using paired “t” test and calculated “t” value is 2.857. At “p” value 0.05 level (df-29) table value is 2.042. Hence hypothesis (H1) is accepted in this study. Chi-square test revealed that there was statistically significant association between pre- test knowledge with demographic variables such as Age in years, Religion, State, Type of family, Residence, Yearly income, Source of information about Breast Self-Examination. Hence hypothesis (H2) is accepted. The finding of the present study revealed that the college students are getting knowledge on Breast Self-Examination.

Table 1. Frequency and percentage distribution of college students according to their age.

Age in year	Frequency	Percentage (%)
17 years	2	6.7
18 years	28	93.3
19 years above	0	0
Total	30	100

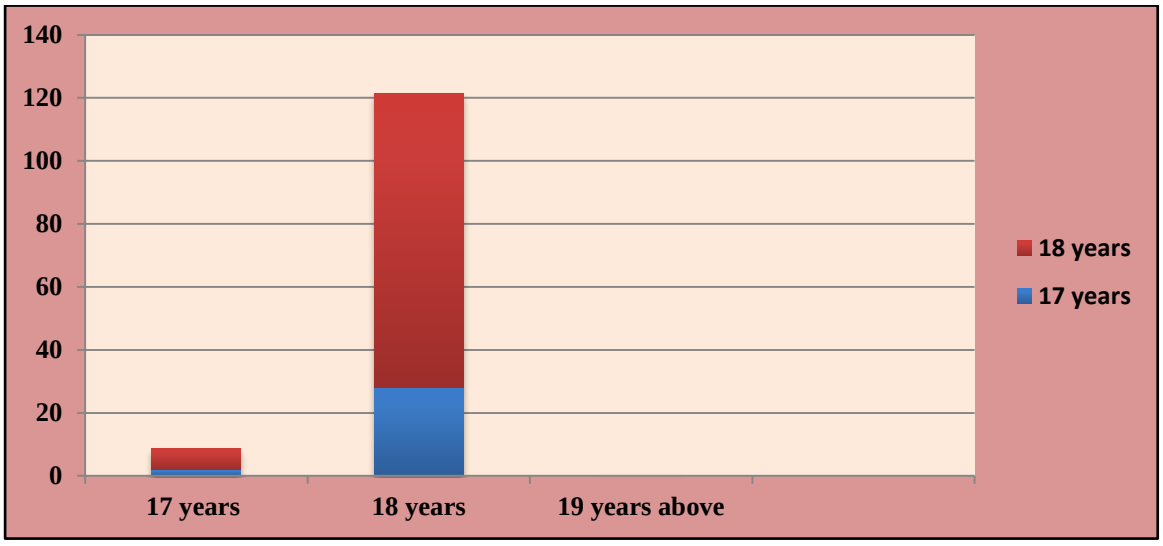

Figure 1. Percentage distribution of college students according to their age.

The above table 1 and figure 1 shows that out of the 30 sample 28 (93.3%) students were at the age of 18 years, 2 (6.7%) students were at the age of 17 years, and 0 (0.0%) students were at the age of above 19 years.

Table 2. Frequency and percentage distribution of college students according to their department.

Department	Frequency	Percentage (%)
Information Technology in AI	0	0
Electronic and Communication Engineering	0	0
Computer Science Engineering	30	100
Biomedical Engineering	0	0
Total	30	100

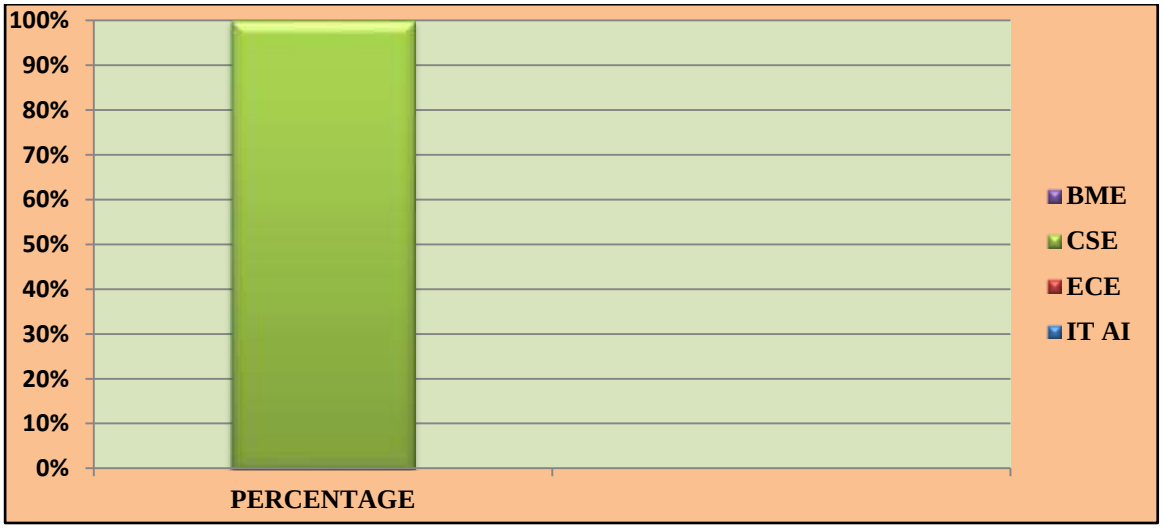

Figure 2. Percentage distribution of college students according to their department.

The above table 2 and figure 2 shows that out of 30 sample, 15(50%) students in ECE and 10 (33.3%) students in CSE and 5 (16.7%) students, 0(0.0%) students in IT AI in BME.

8. Recommendations

- Similar study can be conducted for a large group on a long-term basis. Comparative study can be conducted by using various to find out the effectiveness in reducing breast cancer.
- A descriptive study to assess the knowledge, attitude and practice regarding breast self-examination among Institution.
- Based on the findings of the study the investigator purposes the following recommendations for further research.
- Develop a regular periodic educational program for women to enhance their knowledge, attitude, and breast self-examination practices.
- Increasing the number of health campaigns, multiplying TV shows, and health talks about breast self-examination will improve knowledge and hence attitude and practice.
- Further studies are implemented on a larger probability sample of women with different age groups.
- To evaluate the outcomes of the educational programs and campaigns. Use the findings to refine and improve the strategies for enhancing knowledge, attitude, and practice on BSE women.
- Partner with healthcare providers to integrate BSE education into routine checkups and health services, ensuring women receive accurate information and support.
- Create and distribute educational materials such as brochures, posters, and videos that explain BSE techniques and importance in a clear and accessible manner.
- Engage community leaders and influencers to advocate for BSE awareness and practices, helping to reach more women and build trust in the community.

9. Nursing Implications

- The result of the study shows that majority of the college students had inadequate knowledge regarding breast self-examination during pre-test.
- So the study had several implications for nursing practice, nursing education, nursing administration and nursing research.

10. Conclusion

The present Study was aimed to assess the Knowledge on Breast Self-Examination among First year college students at selected college, Nagapattinam. The study result shows that the majority of 83.3% of students had inadequate knowledge on breast self-examination. Hence the Video Assisted Teaching program was found to be effective in increasing the level of knowledge regarding Breast Self-Examination and which was found to be

effective in delivering knowledge regarding Breast self- Examination. The most common cause of cancer related to death in women. Early detection and screening is vital. Breast self-examination is important but it should not substitute for screening tests. Maintain a healthy weight, add exercise into our routine, limit alcohol and smoking.

Declarations

Source of Funding

This study did not receive any grant from funding agencies in the public, commercial, or not–for–profit sectors.

Competing Interests Statement

The authors have not declared any conflict of interest.

Consent for publication

The authors declare that they consented to the publication of this study.

Authors' contributions

All the authors equally contributed to this study.

Informed Consent

All participants in this study voluntarily gave their informed consent prior to their involvement in the research.

References

[1] Jacob, A. A Comprehensive Textbook of Midwifery & Gynecological Nursing. 6th Edition. New Delhi: Jaypee Publications, Page 678.

[2] Debdas, A.K. Drug Handbook in Obstetrics & Gynaecology. 4th Edition. New Delhi: Jaypee Publications, Page 129.

[3] Dutta, D.C. Dutta's Textbook of Obstetrics. 10th Edition. New Delhi: Jaypee Publications, Page 420.

[4] Kaur, S. Textbook of Midwifery and Obstetrical Nursing. 6th Edition. New Delhi: CBS Publishers & Distributors, Page 43.

[5] Abraham, N. Midwifery, Obstetrics & Gynecology Nursing. 2nd Edition. Frontline Publications, Page 205.

[6] Sharma, J.B. Midwifery and Gynecological Nursing. 2nd Edition. Avichal Publishing Company, Page 503.

[7] Trivedi, S.S., Puri, M., & Agarwal, S. Management of High-Risk Pregnancy. 2nd Edition. New Delhi: Jaypee Publications, Page 316.

[8] Latif, R.K.H., & Latif, Y.K.H. Textbook of Gynaecology. 7th Edition. New Delhi: CBS Publishers & Distributors, Page 225.

[9] Padubidri, V.G., & Shirish, N. Howkins & Bourne Shaw's Textbook of Gynaecology. 14th Edition. Elsevier, Page 162.

[10] Padubidri, V.G., & Daftary, S.N. Howkins & Bourne Shaw's Textbook of Gynaecology. 15th Edition. Elsevier, Page 480.

[11] Jacob, A. A Comprehensive Textbook of Midwifery & Gynecological Nursing. 4th Edition. New Delhi: Jaypee Publications, Page 834.

[12] Kaur, S. Textbook of Midwifery and Obstetrical Nursing. 10th Edition. New Delhi: CBS Publishers & Distributors, Page 595.

[13] Rao, K. Textbook of Midwifery & Gynecology for Nurses. 4th Edition. Elsevier, Page 184.

[14] Wolters Kluwer. Essentials of Obstetrics. 6th Edition. New Delhi: CBS Publishers & Distributors, Pages 873–874.

[15] Padubidri, V.G., & Shirish, N. Howkins & Bourne Shaw's Textbook of Gynaecology. 12th Edition. Elsevier, Page 247.

[16] Marie Elizabeth. Textbook of Midwifery for Nurses. 2nd Edition. New Delhi: CBS Publishers & Distributors; Page 49.